

HG Unit 3 Assignment Sheet Parallel & Perpendicular Lines

Day	Date	Unit 3 Topics	Homework
1	Mon., 9/13	3-1 Angles, parallel lines, 2-column proofs 3-2 Proving Lines Parallel Flow Proofs <i>"Take It to the Net Review Activity"</i>	p. 118 2-6 E; 10-16 E; 24; 38, 40 p. 125 2-20 E; 28-34 E
2	Tues., 9/14	3-3 Triangle Angle Sum Exterior Angle Types of triangles 3-4 Polygons; sum of interior angles; sum of exterior angles	p. 134 2-10 E; 24-36 E; 44, 46, 62 p. 147 16-24 E; 40-44 E; 48
3	Wed., 9/15	QUIZ	p. 150 exs 71-86 Read p. 151 do exs 1-9
4	Thurs., 9/16	3-5 Linear Equations: SF, SIF, PSF Graphing Lines: SIF & table WEOTL: 1 pt & slope; 2 pts	p. 155 2, 10, 18, 20, 24-30 E; 35, 36, 38, 40; 56-62 E (leave #56 in SIF)
5	Fri., 9/17	3-6 WEOTL: Parallel or perpendicular to a given line Review	Review WS
6	Mon., 9/18	Unit 3 Test	

Other Resources:

Try: Take It To The Net. www.PHSchool.com see p. 121; p. 129, etc for codes

Review: Chapter Review p. 173 1-18; 22-44

Extra Practice: p. 692 1-12; 17-28

Unit 3 (HG)

Vocabulary

acute triangle
alternate interior angles
concave polygon
convex polygon
corresponding angles
equiangular triangle
equiangular polygon
equilateral triangle
equilateral polygon
exterior angle of a polygon
flow proof
isosceles triangle

obtuse triangle
point-slope form
polygon
regular polygon
remote interior angles
right triangle
same-side interior angles
scalene triangle
slope-intercept form
standard form for a linear equation
transversal
two-column proof

Postulates & Theorems

Corresponding Angles Postulate: If a transversal intersects two parallel lines, then corresponding angles are congruent.

Alternate Interior Angles Theorem: If a transversal intersects two parallel lines, then alternate interior angles are congruent.

Same-side Interior Angles Theorem: If a transversal intersects two parallel lines, then same-side interior angles are supplementary.

Converse of the Corresponding Angles Postulate:
If two lines and a transversal form corresponding angles that are congruent, then the lines are parallel.

Converse of the Alternate Interior Angles Theorem:
If two lines and a transversal form alternate interior angles that are congruent, then the lines are parallel.

Converse of the Same-side Interior Angles Theorem:
If two lines and a transversal form same-side interior angles that are supplementary, then the lines are parallel.

Theorem: If two lines are parallel to the same line,
then they are parallel to each other.

Theorem: In a plane, if two lines are perpendicular to the same line,
then they are parallel to each other.

Triangle Angle-Sum Theorem: The sum of the measures of the angles of a triangle
is 180° .

Triangle Exterior Angle Theorem: The measure of each exterior angle of a triangle
equals the sum of the measures of its two remote
interior angles.

Corollary: The measure of an exterior angle of a triangle is greater than the
measure of either of its remote interior angles.

Parallel Postulates: Through a point not on a line, there is one and only one line
parallel to the given line.

Polygon Angle-Sum Theorem: The sum of the measures of the interior angles
of an n -gon is $(n - 2)180$.

Polygon Exterior Angle-Sum Theorem: The sum of the measures of the exterior angles
of a polygon, one at each vertex, is 180° .

Slopes of Parallel Lines: If two nonvertical lines are parallel, then their slopes are equal.
If the slope of two distinct nonvertical lines are equal, then the
lines are parallel. Any two vertical lines are parallel.

Slopes of perpendicular Lines: If two nonvertical lines are perpendicular, the product of
their slopes is -1 . If the slopes of two distinct
nonvertical lines is -1 , then the lines are perpendicular.
Any vertical and horizontal lines are perpendicular.